and parcel is incurred jointly. This expenditure is later segregated amongst different services. As such no allocation is made for commuter services at the budgetary stage.

(c) Expenditure on rail based commuter services in Metropolitan area was about Rs. 514 crores for 1989-90. Information for 1990-91 is not yet available.

Modernisation of Coal Mines

*586. DR. LAXMINARAYAN PANDEY: Will the Minister of COAL be pleased to state:

(a) whether the Government have formulated any scheme for the modernisation of the existing coal mines; and

(b) if so, the details therefor?

THE MINISTER OF STATE OF THE MINISTRY OF COAL (SHRI P A. SANGMA): (a) and (b) The modernisation of the Coal Industry including the present mines is a continuos process and is taken up progressively in both underground and opencast mines. The modernisation is being done gradually by introduction of modern mining methods. Some of the modern mining methods being introduced are as follows:—

(i) Deployment of large capacity shovels, dumpers and draglines in opencast mines

(ii) Inpit crushing & conveying system for overburden and coal

(iii) Introduction of mechanised Bord & Pillar system

(iv) Introduction of Side Discharge Loaders/Load Haul Dumpers

(v) Introduction of Continuous Miners such as Road Headers

(vi) Powered Support Longwall technology

(vii) Augur-cum-Drills

(viii) Blasting Gallery method

(ix) Hydraulic mining

These modern methods are directed primarily towards improving production, productivity, recovery of coal and safety of the miners. Selective import of technologies to deal with specific geo-mining conditions from countries having long experience in such technologies are also made. Coal India Ltd. (CIL) have identified 39 mines for modernisation during 8th Plan period. In addition, CIL have identified 34 underground mines for improvement in their productivity. A proposal for financing of the scheme for improvement in the productivity of these 34 underground mines has been posed for World Bank assistance.

Comparative Performance of Locomotives

*587. SHRI TEJ NARAYAN SINGH: Will the Minister of RAILWAYS be pleased to state:

(a) the comparative quantity of fuel used by steam, diesel and electric locomotives separately during the last two years and the cost thereof and the quantity of goods transported by those locomotives separately during the same period; and

(b) the comparative details of cost incurred on the operation of steam, diesel and electric locomotives separately in the same circumstances?

THE MINISTER OF RAILWAYS (SHRI C. K. JAFFER SHARIEF):